

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-2. (Currently cancelled)

3. (Currently amended) The home automation system of claim ~~[1]~~ 4, further comprising:

at least one status sensor for determining a parameter of the home, wherein the controller further controls at least one of the controlled objects in response to the determined parameter of the home.

4. (Currently amended) A ~~[The]~~ home automation system ~~[of claim 1,]~~ for a home having a plurality of rooms separated by doorways, wherein each of the rooms has at least one of the doorways associated therewith, the system comprising:

a plurality of controlled objects each disposed in one of the plurality of rooms;

a plurality of entry/exit sensors each disposed at one of the doorways to detect movement of a person therethrough;

a plurality of room motion sensors each disposed in one of the plurality of rooms to detect occupancy by a person therein; and

a controller for controlling the controlled objects in response to detected movement by the plurality of entry/exit sensors and detected occupancy by the plurality of room motion sensors;

wherein for at least one ~~[each]~~ of the rooms:

the controller assigns the one room to a first room state in response to no detected movement by ~~{one}~~ any of the entry/exit sensors at the doorway associated with the one room and to ~~{a second room state in response to}~~ no detected occupancy by ~~{one of the}~~ any of the room motion sensors ~~{placed}~~ disposed in the one room, to a second room state in response to detected movement by any of the entry/exit sensors at the doorway associated with the one room, and to a third room state in response to detected occupancy by any of the room motion sensors disposed in the one room; and

the control of any of the controlled objects in the one room by the controller varies depending upon which of the first, ~~{and}~~ the second and the third room states the one room is ~~{in}~~ assigned to.

5. (Currently amended) The home automation system of claim 4, further comprising:

at least one spot sensor ~~{for placement}~~ disposed in the one ~~{of the}~~ room~~s~~ to detect occupancy by a person in a specific location within the one room, wherein the controller further controls ~~{at least one}~~ any of the controlled objects in the one room in response to detected occupancy in the specific location by the spot sensor.

6. (Currently amended) The home automation system of claim 5, wherein the controller assigns the one room to the ~~{second}~~ third room state in response to detected occupancy in the specific location by the spot sensor.

7. (Currently amended) The home automation system of claim ~~{1}~~ 4, wherein:
the controller assigns at least one of the controlled objects to a controlled object state in response to at least one of detected movement by one of the entry/exit sensors and detected occupancy by one of the room motion sensors; and

the controller further controls the at least one controlled object in response to the assigned controlled object state.

8. (Currently amended) The home automation system of claim ~~{4}~~ 3, further comprising:

at least one status sensor for determining a parameter of the home, wherein the controller assigns at least one of the controlled objects to a controlled object state in response to at least one of detected movement by one of the entry/exit sensors, detected occupancy by one of the room motion sensors, and the determined home parameter by the status sensor; and wherein the controller further controls the at least one controlled object in response to the assigned controlled object state independent of which of the first, ~~{and}~~ second and third room states the one room is ~~{in}~~ assigned to.

9. (Currently amended) The home automation system of claim ~~{1}~~ 4, wherein the plurality of entry/exit sensors includes at least one light beam detector that comprises:

a sending unit that directs a beam of light across one of the doorways, and
a receiving unit that receives the light beam, wherein the detector is triggered when the light beam is interrupted by movement of a person through the one doorway.

10. The home automation system of claim 9, further comprising:

a reflective material disposed on a first side of the one doorway, wherein the sending unit and receiving unit are disposed on a second side of the one doorway such that the reflective material reflects the light beam from the sending unit back across the one doorway toward the receiving unit.

11. The home automation system of claim 10, wherein the sending unit is disposed at a height from a bottom of the one doorway which is different from a height from the bottom of the one doorway at which the receiving unit is disposed.

12. (Currently amended) The home automation system of claim ~~{1}~~ 4, wherein the plurality of entry/exit sensors includes at least one narrow range motion sensor for detecting movement of a person only in and adjacent to one of the doorways.

13. (Currently amended) The home automation system of claim ~~{1}~~ 4, wherein the plurality of entry/exit sensors includes at least one magnetic contact switch for detecting movement of a door mounted in one of the doorways.

14. (Currently amended) The home automation system of claim ~~{1}~~ 4, wherein the plurality of entry/exit sensors includes at least one pressure pad switch for detecting weight of a person walking through one of the doorways.

15. (Currently amended) The home automation system of claim ~~{2}~~ 5, wherein the spot sensor includes at least one of a narrow range motion sensor for detecting occupancy in the specific location, a light beam detector having a sending unit to direct a beam of light across the specific location and a receiving unit to receive the light beam, and a pressure pad switch for detecting weight of a person walking through the specific location.

16. The home automation system of claim 3, wherein the home parameter includes at least one of a time of day, a level of ambient light, and a level of ambient temperature.

17. The home automation system of claim 3, wherein the home parameter includes at least one of a position of a door lock, a fingerprint detected from a person activating a home doorbell, a moisture content outside the home, a level of a pool of the home, a carbon monoxide level inside the home, a humidity level inside the home, a water level in a basement of the home, and a temperature of water pipes underneath the home.

18. (Currently Amended) The home automation system of claim ~~{1}~~ 4, further comprising:

a communications network connected between the controller, the plurality of entry/exit sensors, the plurality of room motion sensors, and the plurality of controlled objects.

19. The home automation system of claim 18, wherein:
the communications network includes wires that extend to each of the rooms in the home,
and

each of the plurality of entry/exit sensors, the plurality of room motion sensors, and the plurality of controlled objects has a unique address on the communications network for identification by the controller.

20. The home automation system of claim 18, wherein:
the communications network includes at least one hub,
the controller is connected to the at least one hub, and
each of the plurality of entry/exit sensors, the plurality of room motion sensors, and the plurality of controlled objects are connected to the at least one hub.

21. The home automation system of claim 18, wherein:
the communications network includes a wireless transceiver connected to the controller,
and

each of the plurality of entry/exit sensors, the plurality of room motion sensors, and the plurality of controlled objects includes a transceiver for communicating with the transceiver connected to the controller.

22. The home automation system of claim 18, wherein the communications network includes:

- a power line transceiver connected between the controller and AC powerlines in the home;

- a plurality of powerline transceivers each of which connected between the home AC powerlines and one of the plurality of entry/exit sensors, the plurality of room motion sensors, and the plurality of controlled objects for communicating with the powerline transceiver connected to the controller.

23. (Currently amended) The home automation system of claim ~~{1}~~ 4, further comprising:

- a power outlet for connection to an AC power source, the power outlet includes:

- at least one multi-prong receptacle for receiving a power plug from an AC power driven device; and

- a communications port for sending and receiving signals over the communications network.

24. The home automation system of claim 23, further comprising at least one of an IR transmitter jack for connection to an IR transmitter that generates infrared signals in response to the signals received by the communications port, and an IR receiver jack for connection to an IR receiver that generates electrical signals for transmission by the communications port over the communications network in response to infrared signals received by the IR receiver.

25. The home automation system of claim 23, further comprising:
a power switch for turning AC power on and off to the multi-prong receptacle in response to the signals received by the communications port.

26. The home automation system of claim 23, further comprising:
an electrical current sensor for measuring an electrical current through the multi-prong receptacle, and for generating an output signal based upon the electrical current measurement for transmission by the communications port over the communications network.

27-28. (Currently Cancelled).

29. (Currently amended) The method claim ~~[27]~~ 30, further comprising ~~[the step of]~~:
controlling at least one of the controlled objects in response to a status sensor that determines a home parameter.

30. (Currently amended) A ~~[The]~~ method of ~~[claim 27, wherein for each of the rooms, further comprising the steps of]~~ automated control of a plurality of controlled objects disposed in a plurality of rooms in a home that are separated by doorways, wherein a plurality of entry/exit sensors are each disposed at one of the doorways to detect movement of a person therethrough and a plurality of room motion sensors are each disposed in one of the rooms to detect occupancy by a person therein, and wherein each room has at least one of the doorways associated therewith, the method comprising:
controlling the controlled objects in response to detected movement by the plurality of entry/exit sensors and in response to detected occupancy by the plurality of room motion sensors,
wherein for at least one of the rooms the controlling of the controlled objects includes:

assigning the one room to a first room state in response to no detected movement by ~~{one}~~ any of the entry/exit sensors at the doorway associated with the one room and no detected occupancy by any of the room motion sensors disposed in the one room;

assigning the one room to a second room state in response to detected movement by any of the entry/exit sensors at the doorway associated with the one room;

assigning the one room to a third room state in response to detected occupancy by ~~{one}~~ any of the room motion sensors ~~{placed}~~ disposed in the one room; and

~~{wherein the}~~ controlling {steps vary} any of the controlled objects in the one room in a manner that varies depending upon which of the first, {and} the second and the third room states the one room is {in} assigned to.

31. (Currently amended) The method of claim 30, further comprising ~~{the step of}~~:
controlling at least one of the controlled objects in the one ~~{of the}~~ room[s] in response to a spot sensor placed in the one room for detecting occupancy by a person in a specific location within the one room.

32. (Currently amended) The method of claim ~~{30}~~ 31, further comprising ~~{the step of}~~:
assigning the room to the ~~{second}~~ third room state in response to detected occupancy in the specific location by the spot sensor.

33. (Currently amended) The method of claim ~~{27}~~ 30, further comprising ~~{the steps of}~~:
assigning at least one of the controlled objects to a controlled object state in response to at least one of detected movement by one of the entry/exit sensors and detected occupancy by one of the room motion sensors; and

controlling the at least one controlled object in response to the assigned controlled object state.

34. (Currently amended) The method of claim ~~[30]~~ 29, further comprising ~~[the steps of]~~:

assigning at least one of the controlled objects to a controlled object state in response to at least one of detected movement by one of the entry/exit sensors, detected occupancy by one of the room motion sensors, and the determined home parameter by the status sensor; and

controlling the at least one controlled object in response to the assigned controlled object state independent of which of the first, ~~[and]~~ second and third room states the one room is ~~[in]~~ assigned to.

35. (Currently amended) The method of claim ~~[27]~~ 29, wherein the home parameter includes at least one of a time of day, a level of ambient light, and a level of ambient temperature.

36. (Currently amended) The method of claim ~~[27]~~ 29, wherein the home parameter includes at least one of a position of a door lock, a fingerprint detected from a person activating a home doorbell, a moisture content outside the home, a level of a pool of the home, a carbon monoxide level inside the home, a humidity level inside the home, a water level in a basement of the home, and a temperature of water pipes underneath the home.

37. (New) The home automation system of claim 4, wherein for the one room:
the second room state has an expiration time period associated therewith, wherein the second room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room during the second room expiration time period;

the controller assigns the one room from the second room state to a fourth room state in response to the expiration of the second room state; and

the control of any of the controlled objects in the one room by the controller while the one room is assigned to the fourth room state varies from the control thereof while the one room is assigned to the second room state.

38. (New) The home automation system of claim 37, wherein for the one room:
the second room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room and no detected movement by any of the entry/exit sensors at the doorway associated with the one room during the second room expiration time period.

39. (New) The home automation system of claim 4, wherein for the one room:
the third room state has an expiration time period associated therewith, wherein the third room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room during the third room expiration time period;
the controller assigns the one room from the third room state to the fourth room state in response to the expiration of the third room state; and
the control of any of the controlled objects in the one room by the controller while the one room is assigned to the fourth room state varies from the control thereof while the one room is assigned to the third room state.

40. (New) The home automation system of claim 39, wherein for the one room:
the third room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room and no detected movement by any of the entry/exit sensors at the doorway associated with the one room during the third room expiration time period.

41. (New) The home automation system of claim 4, wherein for the one room:
the second room state has an expiration time period associated therewith, wherein the second room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room during the second room expiration time period;
the third room state has an expiration time period associated therewith, wherein the third room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room during the third room expiration time period;
the controller assigns the one room from the second room state to a fourth room state in response to the expiration of the second room state;
the controller assigns the one room from the third room state to the fourth room state in response to the expiration of the third room state; and
the control of any of the controlled objects in the one room by the controller while the one room is assigned to the fourth room state varies from the control thereof while the one room is assigned to the second or third room states.

42. (New) The home automation system of claim 41, wherein the second room expiration time period is less than the third room expiration time period.

43. (New) The home automation system of claim 41, wherein the control of any of the controlled objects in the one room by the controller varies depending upon which of the first, the second and the third room states the one room is assigned to by at least having the second room expiration time period be different in length than the third room expiration time period.

44. (New) The home automation system of claim 41, wherein for the one room:
the fourth room state has an expiration time period associated therewith, wherein the fourth room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room during the fourth room expiration time period; and
the controller assigns the one room from the fourth room state to the first room state in response to the expiration of the fourth room state.

45. (New) The home automation system of claim 44, wherein for the one room:
the fourth room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room and no detected movement by any of the entry/exit sensors at the doorway associated with the one room during the fourth room expiration time period.

46. (New) The home automation system of claim 4, wherein for the one room:
the controller assigns the one room from the third room state to the second room state in response to detected movement by any of the entry/exit sensors at the doorway associated with the one room while the one room is assigned to the third room state.

47. (New) The home automation system of claim 4, wherein for the one room:
the controller assigns the one room from the second room state to the third room state in response to detected occupancy by any of the room motion sensors disposed in the one room while the one room is assigned to the second room state.

48. (New) The home automation system of claim 41, wherein for the one room:
the controller assigns the one room from the fourth room state to the second room state in response to detected movement by any of the entry/exit sensors at the doorway associated with the one room while the one room is assigned to the fourth room state.

49. (New) The home automation system of claim 41, wherein for the one room:
the controller assigns the one room from the fourth room state to the third room state in response to detected occupancy by any of the room motion sensors disposed in the one room while the one room is assigned to the fourth room state.

50. (New) The home automation system of claim 4, wherein for the one room:
the one room includes a manually activatable button/switch device for sending a signal to the controller, wherein in the response to the signal received by the controller while the one room is assigned to the second or third room states, the controller assigns the one room from the second or third room states to a fourth room state; and
the control of any of the controlled objects in the one room by the controller while the one room is assigned to the fourth room state varies from the control thereof while the one room is assigned to the second or third room states.

51. (New) The home automation system of claim 50, wherein for the one room:
the fourth room state has an expiration time period associated therewith, wherein the fourth room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room during the fourth room expiration time period; and
the controller assigns the one room from the fourth room state to the first room state in response to the expiration of the fourth room state.

52. (New) The home automation system of claim 51, wherein for the one room:
the fourth room state expires in response to no detected occupancy by any of the room motion sensors disposed in the one room and no detected movement by any of the entry/exit sensors at the doorway associated with the one room during the fourth room expiration time period.

53. (New) The method of claim 30, wherein the second room state has an expiration time period associated therewith, the method further comprising:

expiring the second room state in response to no detected occupancy by any of the room motion sensors disposed in the one room during the second room expiration time period; and

assigning the one room from the second room state to a fourth room state in response to the expiration of the second room state;

wherein the control of any of the controlled objects in the one room while the one room is assigned to the fourth room state varies from the control thereof while the one room is assigned to the second room state.

54. (New) The method of claim 53, wherein the expiring of the second room state includes:

expiring the second room state in response to no detected occupancy by any of the room motion sensors disposed in the one room and no detected movement by any of the entry/exit sensors at the doorway associated with the one room during the second room expiration time period.

55. (New) The method of claim 30, wherein the third room state has an expiration time period associated therewith, the method further comprising:

expiring the third room state in response to no detected occupancy by any of the room motion sensors disposed in the one room during the third room expiration time period; and

assigning the one room from the third room state to the fourth room state in response to the expiration of the third room state;

wherein the control of any of the controlled objects in the one room while the one room is assigned to the fourth room state varies from the control thereof while the one room is assigned to the third room state.

56. (New) The method of claim 55, wherein the expiring of the third room state includes:

expiring the third room state in response to no detected occupancy by any of the room motion sensors disposed in the one room and no detected movement by any of the entry/exit sensors at the doorway associated with the one room during the third room expiration time period.

57. (New) The method of claim 30, wherein the second room state has an expiration time period associated therewith and the third room state has an expiration time period associated therewith, the method further comprising:

expiring the second room state in response to no detected occupancy by any of the room motion sensors disposed in the one room during the second room expiration time period;

expiring the third room state in response to no detected occupancy by any of the room motion sensors disposed in the one room during the third room expiration time period;

assigning the one room from the second room state to a fourth room state in response to the expiration of the second room state; and

assigning the one room from the third room state to the fourth room state in response to the expiration of the third room state;

wherein the control of any of the controlled objects in the one room while the one room is assigned to the fourth room state varies from the control thereof while the one room is assigned to the second or third room states.

58. (New) The method of claim 57, wherein the second room expiration time period is less than the third room expiration time period.

59. (New) The method of claim 57, wherein the control of any of the controlled objects in the one room by the controller varies depending upon which of the first, the second and the third room states the one room is assigned to by at least having the second room expiration time period be different in length than the third room expiration time period.

60. (New) The method of claim 57, wherein the fourth room state has an expiration time period associated therewith, the method further comprising:

expiring the fourth room state in response to no detected occupancy by any of the room motion sensors disposed in the one room during the fourth room expiration time period; and

assigning the one room from the fourth room state to the first room state in response to the expiration of the fourth room state.

61. (New) The method of claim 60, wherein the expiring of the fourth room states comprises:

expiring the fourth room state in response to no detected occupancy by any of the room motion sensors disposed in the one room and no detected movement by any of the entry/exit sensors at the doorway associated with the one room during the fourth room expiration time period.

62. (New) The method of claim 30, further comprising:

assigning the one room from the third room state to the second room state in response to detected movement by any of the entry/exit sensors at the doorway associated with the one room while the one room is assigned to the third room state.

63. (New) The method of claim 30, further comprising:

assigning the one room from the second room state to the third room state in response to detected occupancy by any of the room motion sensors disposed in the one room while the one room is assigned to the second room state.

64. (New) The method of claim 57, further comprising:

assigning the one room from the fourth room state to the second room state in response to detected movement by any of the entry/exit sensors at the doorway associated with the one room while the one room is assigned to the fourth room state.

65. (New) The method of claim 57, further comprising:

assigning the one room from the fourth room state to the third room state in response to detected occupancy by any of the room motion sensors disposed in the one room while the one room is assigned to the fourth room state.

66. (New) The method of claim 30, wherein the one room includes a manually activatable button/switch device, further comprising:

assigning the one room from the second or third room states to a fourth room state in response to an activation of the button/switch device while the one room is assigned to the second or third room states;

wherein the control of any of the controlled objects in the one room while the one room is assigned to the fourth room state varies from the control thereof while the one room is assigned to the second or third room states.

67. (New) The method of claim 66, wherein the fourth room state has an expiration time period associated therewith, further comprising:

expiring the fourth room state in response to no detected occupancy by any of the room motion sensors disposed in the one room during the fourth room expiration time period; and
assigning the one room from the fourth room state to the first room state in response to the expiration of the fourth room state.

68. (New) The method of claim 67, wherein the expiring of the fourth room state comprises:

expiring the fourth room state in response to no detected occupancy by any of the room motion sensors disposed in the one room and no detected movement by any of the entry/exit sensors at the doorway associated with the one room during the fourth room expiration time period.